

CONDITION OF THE LIGHT-HOUSES ON THE EASTERN
COAST.

MARCH 2, 1843.

Read, and laid upon the table.

Mr. WINTHROP, from the Committee on Commerce, submitted the following

REPORT :

The Committee on Commerce, to whom was referred sundry communications from the Fifth Auditor of the Treasury Department, in relation to the existing condition of the light-houses on the Eastern coast, report :

The Committee on Commerce beg leave to submit sundry communications from the Fifth Auditor of the Treasury Department, in relation to the existing condition of the light houses on the Eastern coast.

These papers have been received at too late a period of the session to undergo any careful examination, or to be made the subject of any specific recommendation. They seem, however, to contain much information, and many suggestions which may be valuable as the basis of future legislation, and which may contribute to a just understanding of the character and efficiency of our present light-house establishment. They should, accordingly, have a place among the public documents of Congress.

TREASURY DEPARTMENT,

Fifth Auditor's Office, February 13, 1843.

SIR: I have the honor to enclose, for the information of the Committee on Commerce, reports made by the superintendents of light-houses in Maine and Massachusetts during the last summer, as to the condition of the several light-houses under their superintendence, respectively, which show—

1. That the lighting apparatus generally is in good order, and that the keepers are attentive to their duty.
2. That the mortar used in the buildings constructed of split stone or hard bricks was made with fresh water and sand, in the belief that it was more adhesive than if made of salt water or sand; but that experience has

proved that the action of salt water and salt air upon it, in a short time, has decomposed the mortar, and rendered it necessary that the joints be repointed, which has been done during the last year, with hydraulic cement, in regard to all the light-houses in the State of Maine.

3. That it appears, from the letter of Eliphalet Grover, who was appointed to oversee the erection of a new tower at Boon island, to the superintendent of Maine, (page 15,) that, in taking down the old tower, which was built of mortar made partly with fresh and partly with salt water, it was discovered that the mortar made with the latter was the most firm and adhesive, and therefore more suitable for light-house towers.

Independently of the information contained in these reports, it may be useful to the committee to know that the average expense of the British light-houses, for the year 1840, as laid before the Parliament and printed, was \$3,602; and that the average expense of the light-houses of the United States, for the year ending the 30th of June, 1841, was \$1,313, as will be seen by the paper herewith enclosed. The British accounts being made up to the close of each year, and ours to the close of each half year, the above comparison in point of time is as near as we can make it.

Should the committee wish to see the returns made by the other superintendents, in respect to the condition of their light-houses for the last year, they shall be furnished on an intimation to that effect being given.

I have the honor to be your obedient servant,

S. PLEASANTON.

HON. JOHN P. KENNEDY,

Chairman Committee on Commerce, Ho. of Reps.

COLLECTOR'S OFFICE, DISTRICT OF PORTLAND AND FALMOUTH,

Portland, July 15, 1842.

SIR: I have the honor to inform you that, in obedience to the instructions communicated in your circulars of the 30th of March and 16th of June last, requiring the several light-houses under my superintendence to be visited in the months of June or July of each year, I have attended to that duty in person the present year, and beg leave to submit the following report:

In consequence of the representations that had been made to me of the effects of the severe gales of the past winter upon these establishments, of which you have been kept advised, it was deemed expedient that some skilful, practical stone mason should accompany me on my tour of inspection.

Accordingly, Mr. Nahum Libby, of this city, was employed, who has carefully examined, with me, all the light-houses, and buildings appertaining to the same, in the State.

They were found to have sustained considerably less damage than was feared, and none of them appeared to require taking down and rebuilding.

The mortar of the walls that have a seaward aspect is washed out in places, and what remains seems to have lost its adhesiveness, and is constantly falling from the joints.

And here I would remark, that complaints have frequently been made to

me of a want of fidelity on the part of the contractors in the construction of these buildings, and, as evidence of it, specimens of the mortar used have been furnished me. They contain, apparently, very little lime, and crumble like lumps of sand.

Its tenacity may have been destroyed by the salt that collects on the walls from the spray thrown against them, which is said to act injuriously on the lime, or sea water may have been used in making it.

The exterior wood work of nearly all the buildings is quite bare of paint, which, from their exposed situations, cannot withstand the frost and storms of a Northern winter longer than two or three years.

The lanterns and lighting apparatus were, for the most part, remarkably clean, and appeared to be in good order; indeed, there were only one or two that could be considered as exceptions, and these were in much better condition than they were last year. From information derived from the several collectors of the customs in the State, and commanders of the steamboats and public and private vessels employed on this coast, I have every reason to believe that the lights are well tended, and shall be disappointed if Captain Howland, who is now on his Eastern cruise, delivering oil, does not report them improved in brilliancy.

By reason of the superior quality of the last year's supply of winter oil, and the new keepers' lack of experience in managing their lamps, the consumption of oil is somewhat increased from the year previous.

Some of the spring oil at Owl's Head and Bear Island lights (about forty gallons in the whole) proving unfit for use, I have been obliged to authorize the keepers to obtain from some of the neighboring lights a sufficiency to last the present month out, if it could be spared, if not, to purchase it.

As these are the only instances of any of the oil furnished last year having been complained of, I have been particular in my inquiries into the cause. A sample was sent me, at my request, which, on being tested by the oleometer, proved to be pure sperm oil. On examining it in the butts, it had the appearance of candied honey. This could not have been the effect of cold, for it was the latter part of June when I visited these establishments.

The account given of it by the keepers is this: When they took possession, and the oil was delivered over to them by their predecessors, that portion of it which they have not been able to burn was heated almost to boiling before being measured. When they first had occasion to use it, which was not till after the weather became mild, it could not be drawn from the bottom of the butts, in which are brass cocks.

On raising the covers, there was found to be a deposite or collection around the inside, of pure white flaky spermaceti, from four to six inches in thickness, within which was liquid and perfectly limpid oil. This was dipped from the tops of the butts, as it was wanted, and burnt as freely as the best winter oil.

Fearing, after a while, that it would be expended before the arrival of their yearly supply, they mixed the spermaceti and oil together, presuming that they could keep it liquid by means of their heaters, and burn it. In this they failed. The two cases are similar in almost every particular. In each, the oil was heated on delivery by the former keeper; spermaceti formed on the inside of the butts, on cooling; the liquid oil dipped out as it was needed, and afterwards mixed with the spermaceti.

Soon after the commencement of the past quarter, the keeper at Boon island lost his boat, and applied for another. He stated that, having occasion to go to the main, he launched her, and had just returned to the island in his float, from mooring her off, when a violent squall arose, and drove her upon the breakers, where she was almost instantaneously stove. As he had no means of getting from the island, I thought it my duty to supply him without delay, and was fortunate enough to find a suitable boat ready made, which I sent him forthwith. This boat is copper fastened, stanch, and of the right dimensions. She was intended for the cutter, but was not accepted, in consequence of her not answering the contract. She cost \$40, about half the price stipulated to be paid for her by Captain Walden.

The keeper of Seguin island has been without a Government boat that could be used ever since his appointment, and has requested to be furnished with one. The boat belonging to the establishment, left by his predecessor, is a large decked fishing boat, that would require a yoke of oxen and two or three men to launch and haul up; besides, she is worn out, and almost worthless. I had examined a new flat boat, which Mr. Bryant had made, under his direction, expressly for landing at Saddleback and York ledges, while employed on the works at these places. I approved of the plan of her, and, understanding she was for sale, I intended to apply for authority to purchase her whenever a boat was required at either of the outer lights. On my return from my cruise, I saw Mr. Bryant, who had come here, as I understood, for the sole object of selling or taking his boat away with him. Wishing to secure her, as I thought her admirably well calculated for Seguin, where there is no boat slip, I took the liberty of purchasing her in behalf of the Government, for \$40. Her first cost, as Mr. Bryant and Captain Walden stated, was \$65. She is very strongly built, and is constructed, in some respects, on the principle of the life boat belonging to the cutter. There are iron bars running the whole length of the bottom, designed to protect her from injury by being run on or hauled over the rocks. In justice to Captain Ward, the keeper of the light-house at Mount Desert Rock, I feel bound to request that he may be provided with a new boat; his life ought no longer to be exposed in the frail and ill-constructed thing he now has. In running from the main to the Rock, distant about thirty miles, he is liable to be caught out and lost in the fog, and consequently to be exposed to severe gales. A boat suitable for the place might, I think, be purchased for from \$40 to \$50. The old one would probably sell for one-third of this amount.

To the keeper of Saddleback Ledge light, Watson Hopkins, it is due that I should recommend an addition to his salary of \$50. Were it not that this light-house was much better built than any other in the State, I should consider his situation less desirable than that of either of the other keepers.

It gives me pleasure to be able to state, in relation to the character of the several keepers, that all of them are believed to be men of sobriety, good morals, and suitable for their respective situations.

Having noticed, in my examination of the vouchers accompanying the keepers' bills of sundries, the great difference between the wholesale and retail prices of the articles charged therein, I purchased such of the materials for painting and whitewashing as I thought would be wanted in re-

pairs this season, at the lowest wholesale price, and took them with me in the cutter; which, you will perceive, were delivered at each light-house, as I visited them.

I know of no one better qualified to do the pointing and other mason work required at the several establishments than Mr. Nahum Libby, the gentleman before referred to. His terms will be reasonable, and his honesty and capableness in the line of his occupation is beyond question.

The expense of all repairs, including materials, will not probably, on an estimate which I have made, exceed eighteen hundred dollars. I hope it will fall one or two hundred dollars short of this sum.

The following is a transcript of memoranda made as each light-house was examined. It describes particularly their condition, &c. :

Whale's Back; Eliphulet Grover, keeper.—This light-house is thought, and has been represented to be, insecure; landed at dead low water, which afforded an opportunity to examine every part of the base or foundation; appears to have sustained very little damage; two or three small stones, which were never confined by bolts or binders, and were placed to make a finish and smooth surface, have been washed out; these should be replaced and bolted; twelve additional iron straps, extending from the ledge, into which they should be fastened, to the top of the base, would add much to the security of the establishment. Accommodation ladder, ventilator, stove, and water casks, want repairs. Lantern, oil butts, floors, window frames and sashes, and boat, need painting. Light-house requires pointing and whitewashing. Lantern, lamps, and reflectors, clean and in tolerable order. Left two casks lime, keg of white lead, three paint brushes, one pound litharge, six pounds black paint, six pounds yellow, two gallons of paint oil, and twelve pounds rattling for rope ladder.

Boon Island; John S. Thompson, keeper.—Buildings require pointing and whitewashing; platform in front, which was carried away last winter, should be replaced, underpinned, and confined to the ledge with iron bolts. This was authorized to be done by the general superintendent, but was deferred by his consent. Boat-house leaks badly, is no protection to the boat, needs shingling; roof, floors, and doors of the dwelling-house, and window sashes of the light and dwelling-houses, want painting; lantern and lighting apparatus clean and in good order. Delivered two kegs white lead, five pounds black paint, three pounds litharge, two casks lime, five gallons paint oil, ten pounds red paint, one whitewash brush, two paint brushes, six pounds putty, and one canister yellow paint.

Goat Island; Thatcher Hutchins, keeper.—Buildings require pointing and whitewashing; doors, stairs, and sashes of the light-house, and roof, floors, sashes, and window frames of the dwelling-house, want painting; roof of the dwelling-house leaks; chimney should be releaded; lamps and reflectors perfectly clean and in good order. Delivered one cask lime, two pounds litharge, four pounds yellow paint, five pounds black paint, ten pounds putty, ten pounds red paint, one whitewash brush, two and a half gallons linseed oil.

Wood Island; John Adams, keeper.—Buildings want whitewashing and pointing; plaster broken and loose in places in two rooms of the dwelling-house; lantern, oil butts, doors, and sashes of the light-house, floor, sashes, and wainscoting of the dwelling-house, require painting; difficulty between the present and former keeper, in relation to improvements and division

fence ; recommended an arrangement, which appeared to be satisfactory to both parties ; lantern and lighting apparatus in tolerable order. Delivered one cask lime, one keg white lead, two pounds litharge, five pounds black paint, ten pounds yellow paint, ten pounds putty, two and a half gallons paint oil, and sundry blank returns.

Seguin Island ; Nathaniel S. Todd, keeper.—Lighting apparatus perfectly clean and in good order ; buildings need pointing and whitewashing ; dome of the lantern, roofs of the bell and oil houses want repairs ; oil butts, window frames, sashes, and floors of the dwelling-house, require painting ; boat unwieldy and nearly worn out ; might be sold for about one-third of the expense of a new one. Delivered two and a half gallons linseed oil, one keg white lead, two paint brushes, five pounds black paint, two pounds litharge, six pounds yellow litharge, five pounds red litharge, and two casks lime.

Burnt Island ; Jos. C. Auld, keeper.—Apparatus for lighting clean and in good order ; buildings want pointing and whitewashing ; dome of the lantern, oil butts, roofs of the dwelling-house, and porch floors, sashes, window frames, and weather boards of the dwelling-house, require painting ; cellar overflows, and damages the flooring timbers above ; drain useless ; should be taken up and relaid. Delivered ten pounds red paint, five pounds yellow paint, two large paint brushes, one whitewash brush, one cask lime, three gallons paint oil, two pounds litharge, twelve pounds white lead, and ten pounds putty, blank for returns, &c.

Hendrick's Head ; Thomas Pierce, keeper.—Very well kept ; lamps, reflectors, and lantern, in good order, and perfectly clean ; buildings want whitewashing and pointing ; dome of lantern, roof, floors, sashes and window frames of dwelling-house and oil butts, want painting. Delivered five pounds black paint, one keg white lead, two and a half gallons oil, two paint brushes, one dozen tube glasses, six pounds putty, and one whitewash brush.

Pemaquid Point ; Jeremiah P. Mears, keeper.—Lamps and reflectors clean and in good order ; buildings require pointing and whitewashing ; lantern, stairs, window frames, sashes, and doors of the light-house, want painting ; oil butts, roof, gutters, weather boards, window frames, sashes, and floors of the dwelling-house, the same ; arch of the oven broken in, and should be rebuilt. Left ten pounds yellow paint, one whitewash brush, one sash brush, two and a half gallons paint oil, one pound of litharge, ten pounds red paint, and five pounds putty.

Franklin Island ; James S. Hanna, keeper.—Tolerably well kept ; keeper disposed to do his duty, but lacks experience ; buildings considerably out of repair ; mortar started, and dropping out in many parts of the light-house ; chimney of the dwelling-house blown down ; cellar wet, and rotting the floor above ; drain stopped ; cistern leaks ; lower hoops off ; buildings require pointing and whitewashing ; wood work of the same, in general, needs painting ; boat slip in part carried away in the gales of the past winter ; lantern, lamps, and reflectors, in pretty good order. Delivered ten pounds yellow paint, one sash brush, one keg white lead, two pounds litharge, two and a half gallons paint oil, ten pounds red paint, one whitewash brush, five pounds black lead, and two casks lime.

Marshall's Point ; Daniel Bartlett, keeper.—Lamps and reflectors clean and in good order ; buildings want pointing and whitewashing ; lantern,

deck, stairs, window frames and sashes, and doors of the light-house, require painting; roof, gutters, window frames and sashes, weather boards and floors of the lower rooms of the dwelling-house, and oil butts, the same. Delivered one keg white lead, five pounds black paint, one sash brush, ten pounds yellow paint, four and a half gallons paint oil, ten pounds putty, ten pounds red paint, two pounds litharge, one whitewash brush, and one large paint brush.

White Head; Joshua Bartlett, keeper.—Lighting apparatus clean and in good order; whole establishment requires pointing and whitewashing. All the wood work of the light-house, except the stairs, eastern side of the roof, floors, window sashes, frames, and gutters, of the dwelling, also the oil butts, want painting; walls of the light-house appear to have been injured by the frost. they leak badly; and the water let in probably freezes and heaves them; windlass wanting, to wind up the weight of the bell machinery; boat-house and slip out of order, and need some repairs. Delivered one whitewash brush, five pounds red paint, five pounds yellow paint, one pound litharge, five pounds black paint, two and a half gallons paint oil, one keg white lead, and ten pounds putty.

Owl's Head; Penley Haines, keeper.—Buildings require considerable repairs; walls of the dwelling and light-houses want thorough pointing and whitewashing; roof leaks badly, in consequence of the shingles being thin, and blown off in places; weather and saddle boards rotten; all the wood work of the light-house, particularly the window frames and sashes, and lower floors, window frames, and sashes of the dwelling-house, need a coat of paint; lantern and oil butts, the same; lighting apparatus in good order, and perfectly clean; oil on hand of poor quality, supposed to have had drippings and other refuse oil mixed with it by some one. Delivered ten pounds red paint, one keg white lead, one large paint brush, one whitewash brush, one pound litharge, eight pounds putty, five pounds black paint, five pounds yellow paint, and two and a half gallons paint oil.

Negro Island; Ephraim S. Fly, keeper.—Lamps and reflectors in perfect order and clean; walls of the light and dwelling-houses want pointing and whitewashing; new floor needed in the kitchen; cisterns useless—have been recently repaired, but will not hold water; lantern, window frames, and sashes of the light-house, kitchen and parlor floors, gutters, window frames and sashes of the dwelling-house, and oil butts, require painting; new boat wanted—this was authorized to be furnished. Delivered six pounds yellow paint, five pounds black paint, thirteen pounds white lead, two and a half gallons paint oil, one pound litharge, ten pounds putty, and six panes glass for the lantern.

Fort Point; William Clewly, keeper.—Lighting apparatus clean and in good order; outside cellar door walls are near falling in; require rebuilding; buildings want pointing and whitewashing; wood work of the light-house, (except the doors and stairs,) lantern and oil butts, roof, gutter, window frames, sashes, and lower floors of the dwelling-house, need painting. Delivered one keg white lead, two and a half gallons linseed oil, ten pounds red paint, one pound litharge, one paint brush No. 4, five pounds yellow paint, ten pounds putty, five pounds black paint, and two dozen tube glasses.

Dice's Head; Benjamin Harriman, keeper.—Lamps and reflectors in excellent order, and perfectly clean; buildings require pointing and white-

washing; lantern, window frames and sashes of the light-house, roof, window frames and sashes and two floors of the dwelling-house, also the oil butts, require painting; new sink needed. Delivered ten pounds red paint, two and a half gallons linseed oil, four pounds putty, one whitewash brush, and one pound litharge.

Eagle Island Point; Nathan Philbrook, keeper.—Lighting apparatus clean and in order; buildings require pointing and whitewashing; roof, window frames and sashes, two of the floors, and weather boards, and gutters of the dwelling-house, also the lantern, window frames, and sashes of the light-house, want a coat of paint; support of the lantern deck not sufficiently arched; centre settled somewhat; lamps, &c., unsafe; an iron stanchion needed. Delivered six pounds yellow paint, three pounds black paint, two and a half gallons linseed oil, one and a half pound litharge, four pounds putty, and ten pounds red paint.

Baker's Island; William Gilley, keeper.—Lighting apparatus clean and in good order; dome, iron railing, window frames and sashes of the light-house, roof, trimmings, window frames and sashes, entry, and one room of the dwelling-house, also the oil butts, require to be painted; whole establishment wants pointing and whitewashing. Delivered four pounds yellow paint, one keg white lead, two large paint brushes, two and a half gallons paint oil, one pound litharge, three pounds black paint, one cask lime, and ten pounds red paint.

Bear Island; Solomon L. Howes, keeper.—Lamps and reflectors in order, and perfectly clean; dome, iron railings, window frames and sashes of the light-house, and oil butts, require painting; new hoops wanted for the cistern; oil on hand of poor quality; keeper says it was injured by being heated when delivered over to him by his predecessor. Delivered for the use of the light house one and a half gallons linseed oil, twelve pounds white lead, three pounds black paint, one pound litharge, eight pounds putty, and one whitewash brush.

Petit Menan; Moses Thompson, keeper.—Lantern old, and leaks; trifling repairs will make it tight; lamps and reflectors on the old plan, clean and in tolerable order; roof in the dwelling-house, window frames and sashes of the light and dwelling-houses, dome, iron railing or guard of the light-house, also the oil butts, require painting; whole establishment wants pointing and whitewashing. Delivered ten pounds red paint, two pounds black paint, and two pounds litharge.

West Quoddy Head; Alfred Godfrey, keeper.—Lighting apparatus in excellent order, and very neat; bell-house thought to be insecure; posts on which it stands should be fastened to the ledge by iron braces; roof of the dwelling-house, window frames and sashes of the light and dwelling-houses, dome, sashes of the lantern, and iron railing around the light-house, also the oil butts, require painting; buildings need painting and whitewashing. Delivered one keg white lead, six pounds black paint, two and a half gallons paint oil, three paint brushes, ten pounds putty, ten pounds red paint, and one dozen tube glasses.

Moose Peak Island; Alex. Milliken, keeper.—Lighting apparatus in tolerable order; buildings require pointing and whitewashing; roof and one floor of the dwelling-house, window frames and sashes of the light and dwelling-houses, and lantern, and iron railing of the light-house, need painting. Delivered for use of the establishment, one keg white lead, five

pounds yellow paint, two large paint brushes, two gallons paint oil, ten pounds red paint, one pound litharge, one cask lime, six pounds putty, and five pounds black paint.

Libby Island; Isaac Stearnes, keeper.—Lantern old, and requires repairs; lighting apparatus clean, and in tolerable order; new burners will soon be wanted; wall of the dwelling-house, which is of brick, is settled off; whole establishment should be whitewashed and pointed; in some of the rooms the plaster is fallen off; light and dwelling-houses need some glazing; much of the glass in both buildings is loose, and without putty; lantern deck, which is of soapstone, is badly cracked; lantern, iron railing around the same, window frames and sashes of the light-house, roof, gutters, weather boards, window frames, sashes, and floors of the dwelling-house, also the oil butts, require a coat of paint. Delivered the keeper one keg of white lead, ten pounds putty, three paint brushes, (one of each size,) ten pounds yellow paint, ten pounds red paint, one pound litharge, five gallons linseed oil, six pounds black paint, one dozen tube glasses, one whitewash brush, and one cask lime.

Nashe's Island; John Wass, keeper.—Tolerably well kept; apparatus for lighting clean, and in pretty good order; buildings require pointing and whitewashing; parts of the roof, two of the floors of the dwelling-house, lantern, and iron railing around the same, oil butts, window frames, sashes, and trimmings, of the light and dwelling-houses, need painting; deck of the lantern cracked; dome leaks somewhat; glass wants reputtying. Delivered, for the use of the light-house, one keg white lead, five pounds yellow paint, three pounds black paint, five pounds red paint, one whitewash brush, three paint brushes, half pound litharge, eight pounds putty, and two and a half gallons paint oil.

Brown's Head; John Calderwood, keeper.—Establishment in pretty good order, and well kept; needs pointing and whitewashing; gutters rotten, and want splicing and painting; window frames and sashes of the light-house, floors of the dwelling-house, also oil butts, require painting; lantern neat; lamps and reflectors clean. Delivered, for use of the light-house, twelve pounds white lead, one whitewash brush, one sash brush, four pounds yellow paint, two and a half gallons paint oil, one pound litharge, eight pounds putty, same quantity black paint, and ten tube glasses.

Saddlebuck Ledge; Watson Hopkins, keeper.—Light-house at this place a superior building, and, with trifling exceptions, in excellent order; built of hammer-dressed granite, and requires no pointing or whitewashing; stove pipe needs repairs; spindle of the ventilator bent, which prevents its traversing; copper gutter of the light-house damaged; iron railing around the base carried away by the sea, should be replaced, for the protection of the keeper and his family; boat slip needed, which, on a plan contrived by Captain Walden, can be built at a trifling expense compared with the cost of the boat slips at other light-houses in the State; about twenty fathoms of Manilla rope wanted to throw off to boats in landing on the rock; lighting apparatus and lantern perfectly clean. Considering the exposed situation of the place, would suggest an increase of the keeper's salary. Delivered one dozen tube glasses and sixteen fathoms of Manilla rope.

Martinicus Rock; Samuel Abbot, keeper.—This establishment was considerably more damaged by the sea in the gales of the past winter than either of the others in the State; foundation of the eastern end of porch

forced in ; wall cracked, and should be taken down and rebuilt ; one of the two chimneys of the dwelling-house blown down, and the other so injured as to require taking down and rebuilding ; all the wood work of the light and dwelling-houses needs painting ; walls of the dwelling-house want pointing and whitewashing ; lantern and railing around the same need a coat of paint ; much of the glass of the lantern and dwelling-house should be reset ; lighting apparatus in good order, and perfectly clean.

Mount Desert Rock ; Benjamin Ward, jr., keeper.—Lighting apparatus in tolerable order, and quite clean ; buildings require pointing and whitewashing ; lantern, iron railing around the same, window sashes, doors, and frames, of the light-house, and oil butts, also part of the roof, window frames and sashes, and two floors of the dwelling-house, need painting ; boat-house and slip considerably damaged ; new boat needed—old one unsuitable, considering the exposure to which the keeper is liable ; blocks and rigging wanted to haul boat up. Delivered, for the use of the establishment, one keg of white lead, five pounds red paint, two large paint brushes, one pound litharge, five pounds yellow paint, ten pounds putty, three and three-quarters gallons paint oil, one cask lime, one single and double block, and thirty fathoms old rigging.

Monhegan Island ; Samuel Abbee, keeper.—Lighting apparatus in good order, and perfectly clean ; establishment requires pointing and whitewashing ; exterior wood work, lantern, and railing of the light-house, oil butts, roof, two floors, window frames and sashes of the dwelling-house, want painting ; shutters of the dwelling-house blown off and destroyed ; floor of the kitchen worn through in several places ; new one needed ; sink rotten and useless ; plaster broken and fallen off in one room. Delivered one keg white lead, three and a half gallons oil, three pounds yellow paint, ten pounds red paint, half pound litharge, eight pounds putty, three pounds black paint, and two barrels lime.

Pond Island ; Daniel Spinny, keeper.—Lighting apparatus clean and in good order ; buildings require pointing and whitewashing ; roof and other exterior wood work of the dwelling-house, also two of the floors of the same, together with the lantern, railing, and oil butts, need to be painted ; oven and kitchen fireplace want repairs ; door of the light-house broken. Delivered, for the use of the establishment, one keg white lead, one whitewash brush, two paint brushes, ten pounds putty, four pounds yellow paint, three and a half gallons paint oil, three pounds black paint, and one pound litharge ; ten pounds red paint wanted—had none to leave.

Portland Head ; Richard Lee, keeper.—Lighting apparatus clean and in good order ; buildings require pointing and whitewashing ; roof of the dwelling-house, sashes and doors of the light-house, also the oil butts, need painting. Timbers of the lower floor of the light-house on which the oil butts stand, rotten ; oil unsafe ; lock of light-house door out of repair ; sink rotten and useless ; oven lid is of wood, and unsafe, liable to take fire ; one of iron should be substituted. No articles for painting or whitewashing delivered ; keeper authorized to procure them.

Cape Elizabeth ; George Ficketts, keeper.—Lighting apparatus in good order, and perfectly clean. Buildings require pointing and whitewashing ; lantern decks of both light-houses started ; seams open, and should be re-leaded ; dwelling-house leaks ; roof sound, but the shingles have become loose, and should be renailed ; kitchen floor worn through near the fire-

place ; cellar bottom covered, in part, with water, which is rotting the flooring timbers above ; cellar of sufficient depth to admit of gravel being hauled in to cover the bottom ; bell-house has never been painted ; is in an exposed situation, and needs painting as much as any of the buildings of the establishment. No articles for painting, &c., delivered ; keeper authorized to obtain them.

I am, very respectfully, sir, your obedient servant,

NATHAN CUMMINGS,

Superintendent of Light-houses in Maine.

HON. STEPHEN PLEASANTON,

*Fifth Auditor of the Treasury, and acting Commissioner
of the Revenue, Washington.*

TREASURY DEPARTMENT,

Fifth Auditor's Office, July 29, 1842.

SIR : I have just received your letter of the 15th instant, reporting the condition of each and all the light-houses in your district, and the conduct of the respective keepers.

I am very much surprised to find that the mortar with which the houses were built does not adhere to the stones, but crumbles and falls from the joints ; and this I perceive is the case with all of them, the one at Portland included, which was built, I believe, when Maine was a colony of Great Britain. Of those which were built under my administration of the light-house department, the most of them were built under the immediate superintendence of Isaac Ilsley, Esq., who, I perceive, on reference to the contracts, always provided that *good lime mortar* should be used, and appointed two respectable persons to examine the work, and grant a certificate that the work was faithfully done before he made payment to the contractor. A certificate of this import was annexed to every contract, before payment was made, and the contract sent to this office.

These facts being so, it is worthy of inquiry whether the salt air and water, acting for a considerable time upon the mortar, may not destroy its adhesive quality, and decompose it.

Of the number built under General Chandler, he informed me that two or three of them were built so late in the season that the mortar was frozen before it was dry, and its adhesive quality was thus in a great measure destroyed.

Mr. Ilsley can inform you who the persons were whom he employed from time to time to examine the light-houses, after they were completed, and to certify as to the faithfulness of the work ; and I must request you to obtain another statement from these persons, as to the good quality of the mortar at that time ; and I must also request that you make inquiry, and furnish me with a statement, in writing, from experienced persons, as to the operation of salt water and air upon lime mortar. Mr. Anderson, the late collector, I have no doubt, would aid you in this inquiry.

I perceive that you have left lime, paint, oil, &c., at the several light-houses, with which to make the repairs. This was all perfectly right ; but as I am inclined to think the salt air will soon remove the pointing

done with common lime, I would suggest the propriety of having all the pointing done with Roman or hydraulic cement. Propose this change to Mr. Libby, and get him to do the work as soon as you can. The lime left at the several light-houses may be used in whitewashing, mending chimneys, &c.

I am much pleased to learn that it occurred to you to carry paints, oil, lime, &c., with you to the different light-houses, and also to engage Mr. Libby to do all the pointing and mason work which was found necessary, as we shall thus have all the repairs made before the frost can injure any part of them.

I would be glad if you would ascertain when the Portland light-house was built, as I have nothing here to show that fact.

You did perfectly right, under the circumstances mentioned, to supply a boat to each of the light-houses at Boon island and Seguin; you will also supply the keeper at Mount Desert Rock with a suitable boat, and dispose of and credit the amount received for the old one.

At a time when Congress is cutting down the salaries of all their officers, as well as their own compensation, it would be impolitic to recommend an increase of salary for the keeper at Saddleback Ledge, although it might be just to do so. You will reconcile the keeper in the best way you can to his old salary.

As I am very desirous to know whether the mortar used in building the several light-houses was originally bad, or has since been injured by the sea, I must repeat my request that you will obtain and transmit to me all the information you can on the subject. You can ascertain from Mr. Hsley, General Chandler,* and Mr. Anderson, who were the persons that inspected the several light-houses built during their time, and you will be pleased to apply to them for certificates on the subject, and also to the contractors, if it be practicable, for their depositions. As we have been charged with erecting bad buildings every where, and very probably the charge will be repeated, it is highly important that we should obtain correct information upon the subject.

You will have the necessary repairs made at Martinicus Rock and Whale's Back, if indeed you did not intend to include them in your estimate of aggregate expense.

I am, &c.

S. PLEASANTON.

NATHAN CUMMINGS, Esq.,

Superintendent of Lights, Portland, Maine.

THOMASTON, September 22, 1842.

SIR: I have this day delivered your letter to Joel Miller. He is at this time quite sick, but will probably be able to reply in a few days.

Reuben McKinney is, I learn, now residing on Parker's island, situated in the town of Phippsburg, or Georgetown, near Bath.

I find it to be the opinion of some of our experienced masons, that lime mortar, made by the mixing of salt water, or sand taken from the sea shore,

* General Chandler was dead, of which I was not aware.—S. P.

will not make a cement, but merely crust on the outside of the seams;* this I should suppose might be the cause why some of the light-houses visited are found to be in the situation they are.

Respectfully, your obedient servant,

JOHN T. GLEASON.

N. CUMMINGS, Esq.,
Collector, &c., Portland.

HALLOWELL, September 15, 1842.

SIR: yours of the 10th came to hand yesterday. You inquire "whether you are now satisfied that good lime mortar, made with fresh water, was used in building the establishment on Dice's Head, and that the work was done in a skilful and faithful manner, and strictly according to contract."

It is impossible at this time to go minutely into circumstances connected with the buildings referred to, as I have had no occasion to call the subject to mind since their completion, until the receipt of your letter.

I was requested by Mr. Hsley, at that time superintendent of light-houses in this State, to examine the work as it progressed. In accordance with that request, I visited the place twice every day. Once or twice I directed the removal of stones which had been laid up in the tower, and considered by me unfit for the place assigned them. As to the mortar, I have no doubt now, nor have I ever had, but what it was made of good lime, and prepared with fresh water. I feel sure that fresh water was more easily obtained than salt could be.

I also feel satisfied the work was faithfully performed, from the fact that, during the progress of it, and since its completion, I have never had an intimation to the contrary; and I feel confident, if it had not been so considered, some of the many persons who visited there during the progress of the work would have given me an intimation of it.

Yours, respectfully,

S. K. GILMAN.

NATHAN CUMMINGS, Esq.,
Collector, &c., Portland.

PORTLAND, September 24, 1842.

SIR: In reply to your letter of yesterday, I have to state that the light-houses on Eagle island, on Nash's head, Wood island, and on Saddleback ledge, were built while I was superintendent of light-houses in Maine; and I am satisfied that the mortar used was made of good lime, and sand not wet with salt water. This was stipulated for in every contract; and in every case I appointed an experienced and skilful stone mason, or bricklayer of established good reputation, to see that the contract was complied with in all its parts.

I never accepted a gift, or paid the contractor, until the overseer thus

* This is an error, as we have ascertained, within a few years past, that mortar made of salt water stands better on the seaboard than that made with fresh water. As a proof of this, see the certificate of Eliphalet Grover, dated Whale's Back, September 15, 1842. All our contracts, however, call for mortar made with fresh water and fresh sand.

appointed certified that it was built, in every particular, in compliance with the contract.

You observe that the pointing in most of the lights, on the sides next to the sea, appears to contain but little lime, and infer that the lime has decomposed or been destroyed by the muriatic acid of the spray.

I have no doubt you are correct in this inference, and I believe that the rock of which our lights are built, which is taken from the sea shore, and is of an uneven and irregular surface, has a deposite of salt adhering to its cavities, which acts on the lime.

Lime is so abundant and cheap in Maine, a contractor would have but little inducement to be sparing of it, to the injury of the work, and of his reputation, too, even if the overseer should prove faithless enough to connive at such fraud.

All towers will leak in heavy storms, unless built of hammered stone, and laid in hydraulic cement, but, while the lanterns are tight and in good order, (and all our lights, save Petit Menan, can boast of these,) all the harm done is, a little extra labor is made for the keeper.

The Portland Head light, although it leaks in heavy weather, has stood for more than half a century, and will probably stand for a century to come, and give, as it always has done, a good light, to the perfect satisfaction of all seamen sailing by it.

Our shipmasters concur in saying that the lights on our coast are not surpassed by those of any country, and I believe the towers will sustain the lanterns as long as any stone or brick building can last.

Very respectfully, your obedient servant,

JOHN ANDERSON.

N. CUMMINGS, Esq.,
Collector, &c., Portland.

CUMBERLAND, *September 26, 1842.*

DEAR SIR: Your letter of the 10th is received, stating that, in June last, you visited the several light-house establishments under your superintendence, and found all the buildings, in some respects, in bad condition, the mortar of the walls falling from the joints, &c., and that there appeared to be but little or no lime in the mortar. Subjoined I find copies of two certificates, signed by myself, that the work was done as therein stated.

You request me to state whether I am now satisfied that good lime mortar was used in building the establishments on Mistake island and Martinicus Rock, and such other information as I may be able to give. I take pleasure, in compliance with your request, in stating that I am now fully satisfied that good lime mortar was used in the construction of both those buildings.

I was present at the commencement of the building of both, and, in obedience to an instruction from Isaac Ilsley, Esq., then superintendent of light-houses in this State, pointed out the site on which the buildings should be erected. I also visited them several times while the work was progressing, and saw a large quantity of lime on there, and ready for use. I likewise examined the mortar in the bed, before using; and, from the fact that no sand suitable for mortar could be obtained at either place, and that

Mr. Berry, the contractor, resided at Thomaston, and transported his materials for the buildings from a wharf within a few rods of several lime kilns, where he could obtain it at the lowest price, I can see no motive that would seem to induce him to substitute sand for lime. I am, therefore, strongly inclined to the opinion that the damp winds and fogs from the sea prevent the mortar from drying until the weather becomes so cold as to destroy its efficacy by freezing.

Very respectfully, yours,

RUEL DRINKWATER.

NATHAN CUMMINGS, Esq.,

Collector, &c., Portland.

LIMERICK, September 23, 1842.

SIR: You requested me to inform you whether I am sure that good lime mortar, made with fresh water, was used in building the light-house establishment at Marshall's point, and that the work was done in a workman-like manner, and according to contract.

I am sure that the water was fresh water that was mixed with the lime, and that the mortar was good lime mortar, and that the work was done according to contract.

Your second was respecting the salt air and water acting for a considerable length of time on lime mortar. I think it helps to decompose it, but not so much as the rain and frost.

You are aware that the walls of a light-house are built very battering, and that vertical joints are usually much larger than in hammer-dressed stone. In the rainy season, the water penetrates those joints, and the frost, acting upon it, soon destroys all the adhesiveness, and causes the building to leak.

It is my humble opinion that Government always will have leaky light-houses on our Eastern coast, until they adopt the plan of building them of hammer-dressed stone, viz: the beds and builds hammer-dressed, so that they will lay a close joint, and laid in hydraulic cement.

Respectfully, your obedient servant,

JEREMIAH ILSLEY.

NATHAN CUMMINGS, Esq.,

Collector, &c., Portland.

WHALE'S BACK, September 15, 1842.

SIR: I have just received your letter of the 10th instant, and now inform you that the first stone was laid in the light-house on Boon island, May 31, 1831, in the morning, and I put a *five-franc piece* under it. The first mortar the masons made did not suit me—there was too much sand in it, and I made them put in more lime. From that time, until the light-house was done, the mortar was made well; all was made with fresh water and fresh sand, and I did my utmost to have it done well. After the light-house was up, it was all pointed with cement outside; but they deceived me in the cement; they put in half sand, and told me it must be mixed so.

If there are any hard thoughts of my not doing my duty (as superintendent of the work) at the Department, the first time I go to York I will send you General Chandler's letter he sent me while the light-house was building.

I am very sure it took 48 casks of lime to build the light-house, and I think the mortar was strong enough. I thought the light-house could not leak when they were building it—but it did. I think it must be owing to the rough stone they had to build it with.

They laid all the stones in good mortar, from the base to the top. I know of no cheat or fraud in the work. They all tried to do the work faithfully. There was one thing I did not like; that was, letting the stairs into the wall.

After I had lit the lamps in the new light-house, I had orders from General Chandler to take the old light-house down to 12 feet, and put a roof on it, to make a wood-house. When I began at the top, I found the mortar was mixed with sea sand, and the rocks were cemented together so that I had to take a crowbar and maul to get the rocks down for a number of feet, and then I came to mortar made with fresh sand, and I then could heave the rocks down with my hands without crowbar or maul. I thought that sea sand was better than fresh. The mortar mixed with fresh sand appeared to be like sand itself.

Whether it is so in the new light-house now, or not, I cannot tell. It may be easily found out whether the mortar was strong enough, by trying it, inside or out.

Sir, I now inform you that I have not been more than four or five hours from this light-house at one time since I took charge of it, the 22d of November last; but I will send my son to York, and if I can find General Chandler's letter that he wrote to me, in regard to my superintending the work while the light-house was building, I will send it to you; but it did not hinder me from trying to have the work done faithfully.

From your humble servant,

ELIPHALET GROVER,

Keeper of Whale's Back Light-house.

NATHAN CUMMINGS, Esq.,

Superintendent of Light-houses in the State of Maine.

AUGUSTA, September 16, 1842.

SIR: Yours has been received, relative to the Government buildings of which I had the superintendence. All that I can say is, that I considered the work well done as could be for rough stone. We used the best stone that could be procured on the island where the buildings were built.

As regards the mortar falling from the joints, I think it will be admitted, by any one acquainted with the business, that it is next to impossible to make mortar or cement stand a great number of years on rough work, more so in the vicinity of salt water; time will affect it. If you should build with dimension stone, say like your custom-house, or the Bunker Hill monument, where the joints are all of a size, it would stand far better; but where buildings are built of such stone as contractors are permitted to build with, it is next to impossible to make the pointing stand for a great length of time. The lime was good, and the cement also. My instructions were to use fresh water, which was invariably done.

I am unable to advise about making them tight, any further than what has been the custom of repairing with cement. I have some knowledge of stone work, as I assisted in building fourteen on the arsenal lot in this town, and also the State-house. The former have all been partially, and some of them wholly, *repointed*; and this was done by pointers from Massachusetts, who follow it as their trade. Therefore, you see that pointing is liable to — upon all stone work, excepting where there is a smooth surface and uniform joint, which will stand if faithfully pointed.

I will again say that the stock used by the contractors was good, as I have already certified, and the work well done. And I saw no disposition in the contractors other than to make as good buildings as they could with the kind of stone usually used for Government light and dwelling-houses.

Respectfully,

JACOB H. ARNOLD.

N. CUMMINGS, Esq.

PORTLAND, *September 28, 1842.*

DEAR SIR: Your note of the 1st instant, respecting the light-houses in Maine, erected under my superintendence, was duly received; in answer to which, I will now inform you that the light-houses in Maine that were erected subsequent to 1821, and previous to 1829, while I was collector of Portland and superintendent of light-houses, were built by special contracts, particularly requiring that the buildings should be erected with suitable stone, laid in mortar made from good lime, sand, and fresh water, and all to be done and completed in a faithful and workmanlike manner. Persons were employed to visit occasionally and superintend the work while progressing. Certificates were required, from those employed, that the whole had been done faithfully, and completed agreeably to contract; and on the production of the certificate, and not before, the payments were made.

I am aware that complaints have been made that the light-houses, after standing a few years, have become leaky, in consequence of the mortar being loosened or washed from the joints. Whether the leaking arises from the unfaithfulness of the workmen in making use of unsuitable cement, or whether it may not be in consequence of the rains and salt vapors and fogs which prevail on our coast during the summer season, acting continually on the cement, I cannot say, but am inclined to believe that it is principally owing to the latter.

You are aware that the walls of the light-houses are thick, and require a considerable length of time for cement to make and become firm; that the buildings are erected during the foggy season, and are in a damp state until completed, and, owing to the thickness of the walls, it is questionable whether the cement ever arrives to perfection, and that after a few years it loses its adhesive property, and becomes worthless. I personally superintended the building of the two light-houses in Cape Elizabeth, and believe the whole work to have been faithfully done; they, however, occasionally require pointing, as do other light-houses.

I am of the opinion that great improvements may be made in building light-houses, and should recommend that the stone, for the outside of the walls at least, be taken from our granite quarries, the stone to be split out to regular or uniform thickness, not less than one foot; the lower and upper

edges and ends, when laid in the walls, to be perfectly straight, and the stones square with the outside, each course to be of uniform thickness round the whole column. The seams will then be small, and may be made perfectly tight and durable, with good Roman cement. It will not be necessary for the stone to be hammer-dressed, but merely coarse-dressed on the outside, but should be perfectly fair and straight on the upper and lower side and ends. The expense of erecting light-houses in the way recommended will be considerably more than in the ordinary way, with rough stone of all shapes and sizes, and will of course require larger appropriations by Congress.

Respectfully, &c.

ISAAC ILSLEY.

NATHAN CUMMINGS, Esq.,
Collector of Customs, Portland.

GEORGETOWN, November 29, 1842.

SIR: In answer to your letter of the 15th September, I will say that all the light-houses that I superintended the building of were done according to contract, and, especially, the sand was fresh, and water likewise, for I was knowing to its being dug out of the ground at Fort point; and the one on Negro island, the contractor gave \$25 to have it brought from Bangor; and the one on Nashe's island, I went with the contractor five miles, and we found it in a field where the grass grew; but the one on Pond island, the sand was carried on before I got there; and I inquired, and they told me it was fresh; and I know the water was fresh; and we had the best of Thomaston lime on all the buildings; and I used the same quantity of sand we generally do—from twelve to thirteen bushels to the cask.

I had worked on ten or twelve light-houses before I was overseer, and have always had fresh sand and water. I helped upon all the light-houses in Maine, and carried fresh sand with us; we used both lime mortar, and numbers of kinds of cement; and we always found it would decompose and fall from the joints, but mostly on the sea side of the buildings. And, sir, I feel fully satisfied it is the salt air and water acting on the mortar; and I think ice freezing on the buildings, and the frost, in the winter season, is the cause mostly. When once the mortar gets wet in the walls, the frost heaves the mortar out of the joints; and the walls being so thick, it is impossible to get them dry.

I have worked on the United States building in Augusta, and on factories on fresh-water streams; the mortar stands well, but the walls are not so thick on factories, neither on the arsenal, as we have on the light-houses, which would give them a better chance to get dry through.

I have recommended to the Department to build the light-houses of hard-burnt brick, laid in hydraulic cement; and, sir, I think a building built of this kind would be very durable. Lay the outside course and the inside course in cement, and the rest may be laid in lime mortar. Paint the outside with two coats of white lead; a building would last twenty-five or thirty years without any repairs, and the cost would be but a trifle more than one built of stone equally as strong, except where the sea breaks with great force, and then the stone should be very large, and well dressed before

laying, and every course of equal thickness, and bedded in cement, without any lime mortar.

Dear sir, I should have answered your letter before, but I was absent from home, and I did not receive it till lately.

Very respectfully, your obedient servant,

REUBEN McKINNEY.

NATHAN CUMMINGS, Esq.,

*Collector of Portland and Falmouth, and Superintendent
of Light-houses in Maine.*

P. S. Any other information in regard to the subject it will give me pleasure to give, if you will let me know.

R. McKINNEY.

DISTRICT OF BOSTON AND CHARLESTOWN,

Collector's Office, Boston, August 1, 1842.

SIR : In compliance with instructions in a circular from your office, under date of the 16th of June last, a copy of which I had the honor to receive from your address, it becomes my duty to report the condition of the light-houses within the district of my superintendence.

These instructions require that the *report should be made in regard to each light-house*; that it should be *as full and accurate as possible*, and that the *examination and report should not be delayed beyond the 1st instant*. A desire was also expressed that the *visit and report upon these lights should be made personally, by myself, unless prevented by other official duties*.

The revenue cutter Hamilton, Captain Sturgis, at the time of the receipt of the circular, being under a process of thorough repair, the commencement of the required examination was delayed, in the expectation of her seasonable preparation to be used in the service.

These repairs, however, occupying more time than had been anticipated, it was found necessary to proceed upon the duty without waiting their completion. Accordingly, on the 18th of July, I took conveyance by land to the various points nearest to the several lights on the *north shore*, and by the means of such water crafts from those points as could readily be obtained, I was enabled to make that part of the visitation.

Returning from this excursion, I found the cutter in such a state of advance, although still unfinished, as permitted Captain Sturgis to proceed in her, with me, along the *southern shore, to Cape Cod*; and, on the 29th of the month, I thus completed the inspection.

The result is in an abstract from my note book of observations, carefully made at the times and places, respectively, I have now the honor to submit, in the order in which the lights were visited.

ON THE NORTH SHORE.

No. 1.

Light in Marblehead harbor; Ezekiel Darling, keeper.

Lantern with 10 lamps and 14-inch reflectors, in two horizontal series of

five in each series. The tower, lantern, and lamps, were in the best possible order. The neatness with which they are kept is immediately and strikingly observable. The boat-house and boat were also in good condition; and the same state of remarkable care, attention, and order, was exhibited in the keeper's dwelling and about the grounds in his improvement. Indeed, it would seem difficult to suggest any thing to be desired more than is now witnessed in the condition of this establishment, and in the apparent fidelity of the keeper. It may well be referred to as a model for imitation.

A few more heavy stone are required to be added to the protection of the sea wall, next the boat-house, from the violence of the sea; and, for this purpose, the keeper was authorized to incur an expenditure not exceeding ten dollars.

New sills to the outside cellar doors are needed, to replace those now in decay; the cost, not exceeding three or four dollars, was also permitted.

I noticed here what seemed an improvement in some of the tube glasses, procured by the keeper, consisting in their being swelled just above the wick, in the shape of an egg, instead of having a *shoulder*, by which their liability to crack by the heat is prevented or diminished.

No. 2.

Plum Island light, on Plum island, in the harbor of Newburyport; Phineas George, keeper.

Two movable wooden towers, with lanterns, of 8 lamps each, in two series of four and four.

These towers being about to be removed, by direction of the Department, on the representation of the officers of the port and many citizens of the town, I requested Mr. Kinsman, the collector, to accompany me to the island, and advise as to their location.

His opinion, with which that of the keeper of the lights coincided, was, that, instead of their being carried from *ten or twelve* hundred feet to the north, as had been proposed, the most northerly tower should be removed but about *one hundred feet*, and the southerly one as much further north and east as would give the range of the new channel, and that both should be cut down and fitted with new lanterns.

Upon consulting with Mr. Jackson, surveyor of the port, I learnt that such also was his advice; and from his observation and experience of the state of the harbor and its navigation, through a long life, the judgment of no one seems entitled to more confidence. I therefore requested Mr. Kinsman, the collector, to cause the removal and repairs of the towers, after making every reasonable inquiry on the subject, and getting proper estimates of expense.

Since the examination, I have received a communication signed by the collector, surveyor, light-house keeper, &c., expressing more fully their opinions on the matter, a copy of which I respectfully submit with this report.

Unless otherwise directed, I shall consider the instructions heretofore given as authority to proceed in the work.

In connexion with the removal and refitting of the lights, some considerable repairs, probably not exceeding thirty dollars in expense, are needed, and may be advantageously made by the workmen on the keeper's house.

No. 3.

Ipswich light, at the entrance of Ipswich harbor ; Joseph Dennis, keeper. Two towers, of brick, with 7 lamps in each lantern ; the light in one revolving ; and the keeper represents the machinery to be defective and liable to stop. The towers, although built but a few years since, leak on the sides and from the decks. They require pointing and whitewashing, which I directed to be done immediately. I find the lanterns and lamps dirty. The front door to the dwelling-house is badly constructed, admitting the water freely in storms ; and I authorized the keeper to have a water table put to it ; also, to repair the putty to the glass, and to paint the window sashes and frames, for their preservation. The walls of the rooms, very darkly smoked, require to be whitewashed, and the wooden steps to the front door, destroyed by storms, should be replaced. The whole expense may be estimated not to exceed twenty-five dollars.

No. 4.

Light on Ten Pound island, Gloucester harbor ; Amos Story, keeper. The lantern containing six lamps, in two series of three each. The tower of stone in pretty good order ; the lamps old, and should be replaced ; the reflectors might answer somewhat longer ; the keeper's dwelling in comfortable repair ; and, upon the whole, appearances better than last year.

A new sink is much needed in the house, the present one leaking and worn out. The cost inconsiderable, and I authorized its procurement.

No. 5.

Gloucester Point light, entrance of Gloucester harbor ; Samuel Wanson, keeper.

Ten lamps, in two series of five each, in an old stone tower, of bad construction, originally erected for a monument, and entirely too small for a suitable lantern. It leaks badly, and a new edifice will soon become indispensable. The lantern and lamps were clean and in good order, and give evidence of better care than last year. The dwelling-house is also in an improved condition, the roof having been repaired and the leaks stopped.

No. 6.

Light on Straitmouth island, near Sandy bay, Gloucester ; John Davis, keeper.

A miserable old brick tower, the walls broken and scaling off, and leaking badly in every part. A new tower ought to be built, and may advantageously be placed about 100 feet southeast of the present structure, on a solid broad foundation of rock.

The keeper is an excellent, attentive man, and careful of every thing. The tower, although so very defective, was as well preserved as it could be, and the lanterns and lamps very particularly clean and neat.

It seems indispensably necessary that *ways* should be constructed from the boat-house to the water. The landing is so abrupt and difficult, that, in a high sea, it must be dangerous to attempt to get on or off, or make the

boat of any use. The expense of *ways* made with spars and rollers is estimated at forty dollars, and I recommend they should be permitted. The keeper was authorized the last year to cause certain repairs upon the dwelling-house, not to exceed in amount one hundred dollars. He seemed not to be aware of the cost he was incurring in the progress of the work, and, in the end, exceeded the limitation by more than fifty dollars. I did not feel authorized to allow this excess without reference to the Department, and the keeper is thus in advance the amount. On examining the work on my last visit, I became fully satisfied that the repairs were reasonable to the full extent in which they were made, and that the money was prudently and judiciously laid out; and I therefore most cheerfully complied with the request of the keeper in transmitting, herewith, to the Department, his representation on the subject, and request for remuneration. He has done several little jobs of personal labor—such as paving the cellar bottom, whitewashing, &c., for which he makes no charge.

No. 7.

Light on Thacher's island, Cape Ann, Gloucester; Charles Wheeler, keeper.

Two stone towers, with lanterns, containing each eleven lamps, in two series of six below and five above, with 22-inch reflectors.

The towers, with the dwelling-house, are new, and are in the best possible order, perfectly neat; and appearances indicate great attention and fidelity on the part of the keeper.

The *landing place* remains in the same situation as at the last report, (to which I beg leave to refer,) and should be improved as then suggested. It has been omitted, from an inability to procure the work to be done for the sum authorized by the Department. Labor being now cheaper, it is hoped it may be effected; and the keeper was instructed to get a new estimate. Some of the canisters are old, and should be exchanged.

No. 8.

Light on Wigwam point, Gloucester, north side; George Day, keeper.

An old wooden tower, built forty years since, and now propped up and sustained on all sides by spars. The lamps, in two series of three each, with fourteen-inch reflectors; the lantern not so clean as it should be; the lamps untrimmed; and the deck covered with oil, which had leaked from the lamps or been spilled.

The keeper's house is poor, but, by the repairs made the last season, is tight and secure from the weather. It is said by the keeper that the house was built at the same time with the tower, under the superintendence of General Lincoln, and with an appropriation *for the whole* of but *two thousand dollars*.

The vane to the chimney in the tower requires to be altered; the expense four or five dollars, which I authorized.

No. 9.

Baker's Island light, in Salem harbor; Ambrose Martin, keeper.

Two stone towers, one with 15 lamps, in two series of 8 below and 7 above; the other with 10 lamps, in two series of 5 each.

The towers, lantern, and lamps, in good order, neat, and well kept. The keeper's house, generally, in good condition, requiring only a few trifling repairs to the oven and in one of the rooms, which I authorized.

ON CAPE COD AND ALONG THE SOUTH SHORE.

No. 10.

Race Point light, at the termination of Cape Cod, six miles from Provincetown ; Elijah Dyer, keeper.

A stone tower, having a lantern with a revolving light of 10 lamps in two series, 6 below and 4 above ; the machinery in good order ; the clock regular, and working well ; the lantern inside wants painting, some of the glass resetting, and the outside of the tower whitewashing ; all of which I directed. The keeper's house, which is connected with the tower by a wooden shed, is of stone, and generally in good repair, the glass only requiring fresh putty to the sashes where it is broken. I authorized the keeper to procure some paint for the floors and some parts of the rooms, which are worn and defaced, he being at the expense of putting it on. A new boat is indispensable to the comfort of the keeper, and for the preservation of the lives of shipwrecked mariners on this hazardous and most exposed point of the cape. The present one has been in use more than ten years, and is decayed and utterly unsafe, even in smooth water. In the opinion of Captain Sturgis, it would not withstand a rough sea five minutes. A new, well built, copper-fastened boat, with sails and rigging, is estimated to cost, at Provincetown, where they are most thoroughly constructed, and cheapest, *sixty-five dollars* ; and I earnestly recommend an authority to its procurement before the storms of the fall season shall give occasion for its use.

The establishment was in neat order, and seems to have been well taken care of.

No. 11.

Long Point light, harbor of Provincetown ; Charles Derby, keeper.

A tower on the top of the keeper's dwelling, of wood. The lantern, containing 10 lamps, in two series of 6 below and 4 above ; clean and in good order. The house tight, and needing no repairs.

The site of this light-house is on a narrow neck of sand, and hitherto has been protected by a breakwater, constructed by piles driven into the sand on the north and east sides, and a wharf, secured by heavy stone, on the south. The sand is, however, shifting, and driven about by the winds and storms of the seasons, and it may reasonably be feared that, at a time it may not be far distant, the sea will make a breach across the isthmus, and force a channel *west* of the buildings, in such manner as to render the point on which they now stand insular, or possibly carry it entirely off.

The keeper appears intelligent and attentive ; and his light, near which we lay through the night, was very brilliant. Last fall his boat (belonging to the United States) was stove in a storm ; and, from the emergency of the occasion, he caused it to be immediately partially repaired, at an expense of \$25, which should be repaid to him. The boat is altogether too weak and light for a situation so much and so often exposed ; and I

recommend that the keeper be authorized to procure a stronger and better one, at Provincetown, by exchange and paying the difference.

No. 12.

Light on the highland of Cape Cod, Truro.

A brick tower, with the new apparatus fitted up by Isaiah W. P. Lewis, under the direction of the late collector, George Bancroft, Esq. A most brilliant light of 15 lamps, with 22-inch reflectors, in two horizontal series of 7 below and 8 above. The lanterns, lamps, and tower, in perfect order.

The conductor or lightning rod requires to be better secured; and the keeper suggests that a small iron stove on the upper deck, near the lamps, would produce a great saving in fuel, over the present mode of warming the whole tower by the use of the brick furnace below.

The dwelling-house is in good condition, with the exception of the glass in the window sashes, which requires to be reputted, and the sills and back door, which should be repaired where there is decay.

The pump to the cistern is worn out, and utterly useless. A new one, with the repairs above mentioned, was authorized.

No. 13.

Light on Billingsgate island, Wellfleet bay; Abijah Gill, keeper.

A brick house, with a tower on the top. The lantern having 8 lamps, in a double series of 4 each. The construction of a circular brick wall in the cellar, laid in hydraulic cement, on a stone foundation, and raised to the height of the *timbers* of the floor, so as to form a support to the superstructure, under the superintendence of Colonel Baldwin, last season, has given effectual protection to the whole building, and especially to the tower. The defect in the cistern has also been cured, and the oven carefully and usefully rebuilt.

The breakwater, also constructed by Colonel Baldwin the last season, appears to have answered, most perfectly, its intended purpose. It has entirely prevented the further abrasion of the shore, and secured the island from the incursion of the sea. The house stands in entire security, and the family feel safe and happy.

The roof of the house leaks somewhat under the shingles, and must, within a year or two, be shingled anew. The roof was shattered on the removal of the house, a few years since, and cannot be made tight by patching. No expense is proposed at this establishment the present year.

No. 14.

Mayo's Beach light, Wellfleet harbor; Joseph Holbrook, keeper.

Tower on the top of a brick house; lantern with six lamps, in two series of three each, in excellent order.

Here, as at Billingsgate, the *cellar* and *cistern*, which were secured the last year, under the superintendence of the work by Colonel Baldwin, are entirely satisfactory. The water is effectually excluded from the one, and retained in the other.

By the mode adopted of constructing a brick circular wall, laid in hydraulic cement, on a stone foundation, from the bottom of the cellar to the

timbers of the floor, a support is given to the whole edifice, which has entirely prevented the working and shaking of the tower, as heretofore, and will greatly tend to the preservation of the building. The *oven*, also, by being properly rebuilt, proves excellent. Indeed, all the repairs and improvements recommended the last year for this place have fully answered the desired end, and the establishment is now in first-rate order.

This harbor is so inland, and the flats extend so far out, leaving miles bare, or too shoal for vessels, at every ebb of the tide, and in winter the harbor is so entirely closed by ice, that many skilful nautical men continue to entertain an opinion that the light is not wanted in this position.

For all the purposes of general navigation, it is said that Billingsgate Island light, about seven miles to the southwest, is amply sufficient; while those who have occasion to come into Wellfleet are, for the most part, familiar with the passage, and in no danger of mistaking the channel.

No. 15.

Nauset Beach light, Eastham, outside the capes; Henry Horton, keeper.

At this place there are three brick towers, with lanterns, having eight lamps, in a double series of four in each. The glass in the lanterns is much of it ground, and so obscured by the sand as to require to be replaced. In other respects the towers and lanterns, including the lamps, are in good order. The exposed situation of this part of the cape, in the very direction of a vast proportion of the navigation, renders the preservation of these lights of the utmost consequence.

The keeper's house is of brick, and in good order. The *oven*, rebuilt last year, like those at Billingsgate and Mayo's beach, is now entirely satisfactory. The *pump* procured by Mr. Dunham, the former keeper, was unfaithfully made, and loses water. It is so important to the family, that I authorized its repair, at an expense not exceeding five dollars.

No. 16.

Light at Sandy Neck, at the entrance of Barnstable harbor; Henry Baxter, keeper.

Tower on the top of a wooden house. Lantern very ordinary, with six lamps, in two series, 4 above and 2 below. The lantern and lamps clean. The dwelling-house in good order, and made comfortable and more commodious by the well-directed repairs of last year. A new boat is wanted by the keeper, the present one being eight years old and in great decay. The place is much exposed to wrecks, and occasion is often given for relief to distressed mariners. The estimated cost of a boat of sufficient size, with her sails, is one hundred dollars.

Some rough plank cellar steps and other slight accommodations are wanted, and were authorized.

The breakwater authorized by the Department to be constructed the last year, for the security of the point on which the light-house stands, owing to the advance of the season when the order was received, and the engagement of Colonel Baldwin at Billingsgate island and Mayo's beach, superintending the repairs at these places, was not commenced. It was thought advisable, also, at the time, to wait the operation of the construction at Billingsgate, before engaging in this work.

The admirable success *there* is now an additional ground of confidence in the proposed undertaking *here*; and as the process of abrasion of the shore is still going on, and the danger to the light constantly increasing, I recommend that the work be entered upon without further delay, and shall anxiously await the instructions of the Department to that end.

Colonel Baldwin's estimates and communication on the subject, made the last season, are again respectfully referred to.

No. 17.

Plymouth harbor light; Joseph Burgess, keeper.

Two old wooden towers,* each with a lantern of eight lamps, in two horizontal series of four in each series. The lantern and lamps were clean, and appeared to be taken good care of.

I cannot but feel it a most imperative duty to urge upon the attention of the Department the situation of these most important lights. The towers on which they are displayed were built more than forty years ago, of wood, and in no wise heavily timbered or strongly framed.

They stand upon a high bluff at the entrance of Plymouth harbor, and in the direction of the roadstead along the whole line of the southern shore to the harbor of Boston. No lights on the coast are more important to the shipping interest, and especially as directory to a haven of refuge to vessels on the approach of bad weather.

The towers have been racked by the storms of forty winters, and the timbers have become weak by decay. It is reasonably to be apprehended that they may be prostrated by the first severe tempest; and if this should be the case, in the advance of the season, the most fearful sacrifice of human life and property must be the consequence.

New structures should be erected, while the present ones can continue to be lighted. The site is favorable to their location, *near by*, and the direction they would give to navigation, in their bearings, need not be altered.

The dwelling-house also is of wood, small and inconvenient; originally badly constructed, now in decay, and not worth repairs. It stands upon the very margin of the land of the United States, bordering upon private property. On being rebuilt, the site should be made better to conform to the improvement of the plat owned by the Government, containing an area of about one acre. I should strongly recommend that the light-houses and dwelling-house should be embraced in one contract, and the work commenced immediately—the construction of the former to be completed, and the lights fitted up *the present season*, and the dwelling-house by the first of June next.

In view of the necessity for rebuilding, I have not thought proper to propose any repairs. It would be the worst possible economy to lay any thing out on the present buildings.

I beg leave to add, that there are at this place three 24-pound iron cannon and two long 18-pounders, belonging to the United States, together with the irons of several decayed carriages; and I respectfully submit the propriety of communicating the fact to the Secretary of War, that they may be sold or otherwise disposed of.

* These towers have been rebuilt since this report was made.—S. P.

No. 18.

Scituate light, in Scituate harbor; George Osborn, keeper.

The lantern in a high tower, constructed with stone masonry to the lower deck, and with brick above; showing a colored light of four lamps in the lower lantern, and eleven lamps in two series of six and five (uncolored) in the upper lantern. The tower, lantern, lamps, and canisters, in excellent order, much improved since the inspection of the last year—the obvious result of better attention and care on the part of the keeper.

The dwelling-house is poor, and leaks in the roof and by the windows. The underpinning or foundation walls were originally laid with small cobble stone, which are now loose and in parts falling in. This structure is of wood, and was erected, as I was informed, about thirty years since, and must soon receive a thorough repair, from cellar to roof. Believing that it might be made tenantable another year by a little patching of the shingles and repairing of the glass, with some slight mending of the plastering, &c., I authorized these things to be done, the whole expense not to exceed twenty dollars.

The shore near the point on which the light-house stands is gradually but constantly encroached upon by the sea, which the last season, in a storm, made a fair breach across it between the tower and the dwelling-house. The shore, however, being covered with rocks, may yet resist further inroads from the water; but, should it prove otherwise, a breakwater for a short distance, and easily built, will be effectual to the protection of the buildings. The light is an important one, and should be maintained, unless, indeed, a construction on *Minot's ledge*, which has been earnestly desired, should supersede its further occasion.

No. 19.

Boston light, entrance of Boston harbor; David Tower, keeper.

An intermitting light of 14 lamps, with 22-inch reflectors, in two series, of great brilliancy; the lantern on a stone tower 60 feet in height, one of the very best, as well as one of the most important lights on the coast, leading the whole navigation in and out of Boston harbor. The lantern, lamps, and machinery, in the best possible order. The deck of the tower, however, leaks, and should be coppered, as the most effectual security against further defect.

The dwelling-house, erected a few years since, is of wood, and requires painting. In doing it the present season, and before the old coat is entirely washed off, a single new coat may answer, and thus the expense be sensibly diminished.

A small piece of lead pipe is wanted for the cistern, and a few plank, as a guard to the stone stairway, both of which I authorized.

The stairway, constructed for a landing place the last season, is well done, and perfectly safe and convenient. The new boat, also procured last year, proves stanch and good.

No. 20.

Light on Long Island head; Charles Beck, keeper.

A low stone tower, with a lantern containing 9 lamps, in two series of 3 below and 6 above. The lantern and lamps in good order.

Parts of the tower, where wood was used in the building, about the doors, windows, and stairways, are in decay, and will probably need to be repaired another year.

The tower itself, for want of a sufficiently deep foundation, appears to be moved by the winter's frost, and the glass in the lantern has thus been cracked and broken.

The fence around the land of the Government requires to be repaired, and must have some new posts. Some trifling repairs are also required in the dwelling-house, both of which I directed.

The boat-house and ways, constructed last year, are in excellent condition, well taken care of, and answer useful purposes.

Such is the account, in detail, of the state of the light-house establishment in this district. I beg leave to repeat the assurance, given in my letter of the 29th ultimo, that, *in the general*, the lights are in good order, well kept, and answer the important purpose for which they are designed.

The mariner is guarded by them from points of exposure, and conducted, through their instrumentality, in safety to the ports of destination. The shipwrecked seaman is often rescued from impending destruction by the adventurous keepers of these lights, and the relief they afford to vessels in distress is the means of preserving property, annually, an hundred fold the amount of expenditure they occasion.

I not only carefully examined these lights by day, but lay *within sight and near by* most of them by night, and witnessed their appearance and operation. I inquired, also, of many intelligent men, as to their occasion and use, and the result of the whole is, an undoubting conviction that they are *all useful*, and, perhaps, with the exception of that at Mayo's beach, and the one at Scituate, when a light shall be placed at Minot's ledge, *indispensable*.

I have pleasure in adding, that there has been a decided improvement in the condition and careful management of the lights within the last year.

In concluding this report, I may be permitted to say that I have found the inspection of the lights, according to my sense of duty, no *pastime or trifling service*. To visit twenty different stations, some of them on small sea-girt islands, inaccessible but in light boats, and others of them on rock-bound shores, against which the tide and surf strongly beat, rendering the approach difficult, and the attempt at landing often dangerous, is no indulgence to be sought, or labor and exposure to be disregarded.

The mode of inspection adopted by the Department I believe *effectual* to secure vigilance and fidelity on the part of the keepers of these lights. Whether with *more economy or better results*, the service can otherwise be performed, is respectfully submitted to the judgment of those whose province it is to decide and direct.

I have, &c.

LEVI LINCOLN,

Collector and Superintendent, &c.

STEPHEN PLEASANTON, Esq.,

Fifth Auditor of the Treasury, &c.

COLLECTOR'S OFFICE, EDGARTOWN, July 29, 1842.

SIR: Having completed, by the aid of the revenue cutter Jackson, Lieutenant Charles Grover commanding, the examination of the light-vessel and

light-houses in my district, I now submit my report, agreeably to your directions, under date of June 16, 1842.

Bird Island.—This light-house is in good order, and well kept. The island is exposed to the whole rake of the sea from the southwest. The southwest part of the island is gradually washing away. If some heavy rocks were hauled just above low-water mark, I think it will protect the island; the probable expense will be \$40. The boat pier is much out of repair. I authorized it repaired; probable expense \$20.

Cape Poge.—This light-house is in good order and well kept, except that it leaks badly. Estimate for temporary repairs, \$25.

Chatham.—I found this light-house in very good order, and well kept. The keeper suffers great inconvenience for want of water. He has no cistern or well, and is compelled to bring water from the well of a neighbor, some distance. He respectfully asks that he may be furnished with a cistern. There is an old dwelling-house on the premises, belonging to the United States. Mr. Collector Lincoln requested the superintendent for building the light-house to appraise it, which he did at \$80. From letters written by Mr. Lincoln, and other information, I felt authorized to sell it for that sum, as it was fast going to decay; and I accordingly sold it to the keeper for that sum, which I deducted from his last quarter's salary. I respectfully ask your approval thereof. Probable expense of building a cistern, \$60.

Clark's Point.—This light-house is in tolerable order; not kept so well as some.

Cutterhunk.—This light-house is very well kept, and in good order.

Dumplin Rock.—I found this light-house in excellent order, and very well kept.

Edgartown.—This light-house leaked very much; the roof has lately been new shingled in a thorough manner, and is now perfectly tight; it is in very good order, and well kept. The causeway breakwater, leading from the shore to the light-house, is much out of repair.

Gay Head.—This light-house is well kept, and in good order, excepting the reflectors, which are old and much worn. I think it expedient there should be new ones.

Holmes's Hole.—I found this light-house in very good order, and well kept.

Monomoy Point.—This light-house is in good order, and well kept. It stands on a beach, the sand of which is often shifting. The effect of high winds is to blow the sand from the house, and thereby undermine it. The keeper, at his own expense, has carted many loads of sea weed, and put them about the buildings, to protect them, which has had a good effect. More sea weed is yearly required.

This light-house is on an island, distant about seven miles from Chatham, which is the nearest settlement. The keeper's boat is very old, and good for nothing. It seems absolutely necessary he should have a new one. I respectfully ask for authority to furnish him with one. Cost of boat, \$90.

Nantucket.—This light-house is well kept, and in good order, excepting a small part of the roof of the dwelling-house, which needs some slight repairs. Estimated expense, \$5.

Nantucket Harbor.—A respectable and intelligent man reports this light-house well kept, and in good order.

Nantucket Beacon.—This light-house is in good order, and well kept.

Nantucket Cliff.—These light-houses are well kept, and in good order, excepting the roof, which is somewhat open, and injures the lights. I have ordered them partially ceiled inside. Probable expense, \$5.

Ned's Point.—This light-house is in the most perfect order, and well kept. The southwest part of the point on which the light-house stands is exposed to the sea, which is making rapid inroads. By hauling large rocks just above low-water mark, in my opinion, the evil will, in a great measure, if not wholly, be prevented. Estimated expense, \$40.

Nobsque.—This light-house is in very good order, and well kept. The boat pier is washed on shore, not having been properly ballasted. Ordered it replaced. Estimated expense, \$15.

Tarpaulin Cove.—Found this light-house in excellent order, and well kept. The dwelling-house leaks badly around the window frames. Gave permission to have four window shutters made, to prevent the leaking. Estimated expense, \$15.

Point Gammon.—This light-house is in good order, and well kept.

Light-vessel on Tuckernuck shoal.—This vessel appears to be somewhat rotten, and the copper is off in many places. I think she ought to be examined by a ship carpenter, as, in my opinion, she is not sufficient to withstand another winter without considerable repair.

The stone and brick light and dwelling-houses are generally leaky, some more and some less, seemingly through some defect in the mortar or cement.

The light-house keepers in this district are, in my opinion, faithful and efficient men, worthy of the confidence reposed in them.

The above report is respectfully submitted, by, sir, your obedient servant,

LEAVITT THAXTER,

Superintendent of Light-houses, Mass.

HON. STEPHEN PLEASANTON,

Fifth Auditor Treasury Department, Washington.

Cost of maintaining light-houses in the United States during the year ending June 30, 1841, viz :

For salaries of keepers of 256 light-houses	-	-	-	\$94,038	33
For repairs, refitting, and improvements	-	-	-	125,357	82
For oil, tube glasses, &c., expenses thereon, and of repairing apparatus	-	-	-	116,735	96
				<hr/>	
For maintenance of 256 lights for one year	-	-	-	336,131	11
Being an average per light of \$1,313.					

Cost of maintaining light-houses in Great Britain during the year ending December 31, 1840, viz :

For maintenance of 40 light-houses one year, and 1 light-house three quarters, say 40½ light-houses one year, sterling £30,580 16s. 5d., at \$4 80 to the sterling £, equal to \$146,787 94 Being an average per light of \$3,602 15.

J. D. KING.

TREASURY DEPARTMENT,

Fifth Auditor's Office, February 13, 1843.

NOTE.—The above statement is extracted from the accounts rendered to the Fifth Auditor, and from a statement made and printed under the authority of the British Government.

TREASURY DEPARTMENT,

Fifth Auditor's Office, February 20, 1843.

SIR: I have the honor to enclose, herewith, for the information of the Committee on Commerce, copies of two letters received from Captain Sturgis and Captain Frazer of the revenue service, at Boston and New York, showing the admirable condition of our lights within the cruising ground of these gentlemen. The lights to the south are equally good.

I have the honor to be, very respectfully, sir, your obedient servant,
S. PLEASANTON.

HON. JOHN P. KENNEDY,

Chairman Com. on Commerce, Ho. of Reps.

Boston, January 31, 1843.

DEAR SIR: On my last cruise I examined the new lights at Plymouth; they give a beautiful light. On the 27th instant I run off towards Cape Cod, being a very suitable night to observe lights; we saw Plymouth, Barnstable, Race Point, Highland, and Long Point lights all at the same time, and all of them excellent lights. The Highland light is seen equally as far since the change of lamps as before—say 27 or 30 miles. We run by log; but, as there is such a strong tide, it is no true estimate. The Highland lights have been seen in the town of Plymouth. I should think a navigator entering our bay, and seeing these lights as I saw them, would conclude at once that very little improvement could be made by civil engineering. I also think, if a navigator can see a good light 20 miles, it would be satisfactory. All masters I converse with speak in high terms of our lights; and I think it does no harm for a cutter to be cruising round among them occasionally.

I am, with great respect and regard, your obedient servant,

JOSIAH STURGIS,

Captain United States revenue service.

HON. STEPHEN PLEASANTON.

UNITED STATES REVENUE CUTTER EWING,

New York, February 13, 1843.

SIR: It having been my intention for some time to report to you the improvement in the condition of the light-houses within my cruising district, I have lately had the opportunity of seeing them all at night.

The lights in this harbor, and upon the coast, from Montauk point to Barnegat, have improved greatly within a short period, and are well kept. The lights upon the highlands of Neversink may be seen distinctly at the distance of 30 miles; and the light upon Sandy Hook, which formerly could with difficulty be seen 14 nautical miles, may now be seen at 25. The lights within the Sound appear, with the exception of Stratford Point, to be in good condition.

Having been nearly eleven years employed in this neighborhood, I have had the opportunity of witnessing their improvement, and can safely say, that at no time during that period have they been in as good condition as during the past year. The beacons lately erected on Sandy Hook shine with great brilliancy, and may be seen eleven miles, while the light on Robins's reef is visible when outside of Sandy Hook.

I am, sir, very respectfully, your obedient servant,

ALEX. V. FRASER,
Captain.

EDWARD CURTIS, Esq.,
Collector, &c.

TREASURY DEPARTMENT, FIFTH AUDITOR'S OFFICE,

February 27, 1843.

SIR: I have the honor to enclose, for the information of the Committee on Commerce, a paper from presidents of seven insurance companies, and one from the wardens of the port of Boston, as to the character of our light-houses on the Eastern coast.

I have the honor to be, very respectfully, your obedient servant,

S. PLEASANTON,
Fifth Auditor.

HON. JOHN P. KENNEDY,
Chairman of Com. on Commerce, Ho. of Reps.

Boston, February, 1843.

The undersigned, presidents and directors of insurance companies in the city of Boston, with pleasure state that we do not know of any complaints from navigators of inefficiency in the light-houses at present established on the coast of New England, and we believe they are good, and under judicious management.

At the same time, we do know that navigators complain of the want of a good and sufficient light-house on Minot's ledge, and we believe that such a light would be of *immense value* to vessels bound into this and the

neighboring harbors, as we have fully set forth in our former petitions to Congress.

CALEB CURTIS,
Commissioner of Pilots for harbor of Boston.
THOMAS LAMB,
President of Washington Insurance Company.
N. PARSONS,
President Hope Insurance Company.
JOHN G. NARRO,
President Tremont Insurance Company.
JNO. L. DIMMOCK,
President Warren Insurance Company.
FRANCIS WELCH,
President Franklin Insurance Company.
JOS. H. ADAMS,
President N. E. Mutual Marine Insurance Co.

BOSTON, *February 13, 1843.*

We, the subscribers, port wardens for the port of Boston, do state, that the office we hold necessarily brings us in contact with the greater part of the masters of vessels that arrive in this port, and we have not, to the best of our recollection, heard one solitary complaint from any one as to the inefficiency of any one of our light-houses ; and we have every reason to believe that the lights on our coast are good, and under judicious management.

ROBT. B. EDES.
SAML. NICKELS.
J. M. ATKINS.

